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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,109

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EXAMINER

HILTON, ALBERT

ART UNIT

PAPER NUMBER

1716

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,109	Applicant(s) KIENER ET AL.	
	Examiner Albert Hilton	Art Unit 1716	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 07 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,6 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1, 4, 7, 10-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viscardi (US Patent No. 3076124) in view of Higginson (US Patent No. 3132048).

1. Regarding claim 1, Viscardi describes a dosing device (**doctor blade 16**) arranged on an application roller (**printing plate cylinder 14**) such that: between the dosing device (**16**) and the application roller (**14**) a sump (**reservoir 15**) is provided (Viscardi: column 2, lines 17-22 and Fig. 1), and a dosing gap (gap between **16** and **14**) is provided between the dosing device (**16**) and the application roller (**14**) through which a liquid is supplied to the application roller (**14**) to apply the liquid from the application roller (**14**) to one side of a substrate web (**textile web 11**) (Viscardi: column 2, lines 17-22 and Fig. 1). The dosing device of Viscardi comprises only a first area, and does not comprise rotatably selectable areas that differ and that have different dosing gaps, wherein said areas are selectable by rotating the dosing device. However, Higginson teaches the use of a rotatably selectable dosing device (**adjustable doctor C**) that forms a gap between the dosing device (**C**) and an application roller (**cylinder B**) wherein said dosing device (**C**) comprises rotatably selectable areas (**ribs c**) that differ from one another (Higginson: column 1, lines 61-66, column 2, lines 1-8, and Figs. 1-2). Higginson teaches that the use of such a rotatable dosing device (**C**) allows for control over the thickness of material delivered to the substrate (Higginson: column 1, lines 10-21). One of ordinary skill in the art at the time of the invention, motivated by a need to

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control the thickness of material passing through the dosing gap in the apparatus of Viscardi, would therefore have found it prima facie obvious to replace the dosing device of Viscardi with the rotatably adjustable dosing device of Higginson.

2. Regarding claim 4, the dosing device (**C**) of Viscardi in view of Higginson comprises multiple areas (**ribs c**) provided as external surface areas (Higginson: column 1, lines 64-66, and Figs. 1-2).

3. Regarding claims 7 and 16, Viscardi in view of Higginson describes a mechanical control device (**indexing means, crank c2, holes c4**) which selects areas of the dosing device (**C**) and controls the angle of the doctor blades (**c**) (Higginson column 1, lines 61-70).

4. Regarding claim 10, the external surface (**ribs c**) of the dosing device (**C**) of Viscardi in view of Higginson is part of a roller wall section (**C**) (Higginson: Column 1, lines 61-66 and Fig. 2).

5. Regarding claim 11, the doctor blade of Viscardi in view of Higginson (**C**) is adjustable through the use of a plurality of holes (**holes c4**) in order to set a dosing gap width (Higginson: column 1, lines 61-70 and Fig. 1).

6. Regarding claim 12, the doctor blade of Viscardi in view of Higginson (**C**) is capable of being rotated such that the blades (**c**) are directed at an angle greater smaller than 90 with respect to the application roller (**roller B**) (Higginson: column1, lines 66-70 and Fig. 2).

7. Regarding claim 14, the different areas (c) of the dosing device (C) of Viscardi in view of Higginson are even distributed over the circumference of the device (C) (Higginson: Fig. 2).

Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14 and 16 above, and further in view of Broderick (US Patent No. 3924313) and Klenk (US Patent No. 2995180).

8. Regarding claim 5, Viscardi in view of Higginson teaches a smooth roller (14) (Viscardi: Fig. 1), but does not teach an optionally smooth or structured roller. However, Broderick teaches that engraved cells on the roller surface of an applicator allows for the transfer of liquid as the liquid is picked up in the cells of the roller (**Broderick: column 1, lines 5-21**). One of ordinary skill in the art at the time of the invention, desiring to improve the ability of the roller of Viscardi in view of Higginson to transfer liquid, would therefore have found it obvious to make use of a structured application roller.

9. Further regarding claim 5, the doctor blade (c) and external surfaces areas (c) of Higginson are smooth (Higginson: Fig. 1). However, it is known in the art, as taught by Klenk, that a structured doctor blade (**doctor blade 4**) can be used to produce a pearled or creped substrate (Klenk: column 2, lines 27-36 and Figs. 2-4). One of ordinary skill in the art at the time of the invention, motivated by a need to produce pearled or creped paper, would therefore have found it obvious to make use of the

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structured doctor blade of Klenk in the apparatus of Viscardi in view of Higginson and Broderick.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14 and 16 above, and further in view of Remer (US Patent No. 3565039).

10. Regarding claim 8, Viscardi in view of Higginson but do not teach a temperature-regulating facility arranged inside or outside the roller-shaped body of the dosing device. However, Remer discloses a web substrate coating facility (**unit 20 and shell 22**) arranged outside a system of rollers (**26, 27, 24**) that comprises a temperature-regulation coil (**coil 32**) (Remer: column 3, lines 36-70 and Fig. 1). Remer further teaches that temperature regulation of the region around the coating apparatus can facilitate various coating operations by, for example, evaporating a solvent vehicle that is absorbed by the web (Remer: column 3, lines 69-75 to column 4, lines 1-7). One of ordinary skill in the art, motivated by a need to deliver a dosed coating comprising a solvent vehicle to a web substrate would have found it obvious at the time of the invention to place the dosing device of Viscardi in view of Higginson into the temperature-regulated facility of Remer, with the reasonable expectation that such a modification would allow for the rapid evaporation of the solvent.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14, and 16 above, and further in view of Feiertag (US Patent No. 3664561).

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11. Regarding claim 9, Viscardi in view of Higginson does not explicitly teach the use of guide rollers upstream of the application roller. However, it was well-known in the art at the time of the invention, as exemplified by Feiertag, to use adjustable guide rollers upstream of a processing station to ensure that the substrate is properly aligned (Feiertag: column 1, lines 39-64). One of ordinary skill in the art at the time of the invention, needing to properly align the substrate prior to coating in the apparatus of Viscardi in view of Higginson, would therefore have found it prima facie obvious to add guide rollers to the apparatus as is taught in Feiertag.

Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viscardi in view of Higginson as applied to claims 1, 4, 7, 10-14, and 16 above, and further in view of Nordby (US Patent No. 6637330).

12. Regarding claims 13 and 15, Viscardi in view of Higginson teach the use of doctor blades (**c**) (Higgins: column 1, lines 64-66 and Fig. 2), but do not teach the use of rapidly detachable doctor blades.

13. However, the use of such clamps to hold doctor blades is known in the art, as exemplified by Nordby. Nordby discloses a dosing device with doctor blades (**4**) that can be detached by turning a lever (handle 35) that actuates an eccentric clamp (**clamping rail 5, beam 3**) (Nordby: column 10, lines 13-28, Fig. 13a-d). Nordby further teaches that said doctor blades wear down rapidly (Nordby: column 1, lines 41-55).

14. One of ordinary skill in the art, motivated by a need to maintain a sharp working surface on the doctor blades, would have found it obvious at the time of the invention to use lever-actuated eccentric clamps to affix doctor blades to the scrapers of

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Viscardi in view of Higginson, with the expected result that such a modification would allow for worn working surfaces to be replaced quickly.

Response to Arguments

15. Applicant's arguments filed 10/07/2010 have been fully considered but they are not persuasive.

16. In response to applicant's argument that Higginson and Viscardi are non-analogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Higginson and Viscardi are concerned with devices for coating a running sheet of web material utilizing an application roller and a doctor blade, and therefore the teaching of Higginson would be reasonably considered to be pertinent to the teachings of Viscardi.

17. Applicant argues that, while Viscardi does not explicitly describe an adjustable doctor blade, it is typically necessary in the art to adjust a doctor blade to accommodate different coloring materials or web speeds. Therefore, applicant argues, one of ordinary skill in the art would not have looked to Higginson for a solution to adjusting a doctor blade.

18. The examiner disagrees with this argument, and maintains that Viscardi does not teach an adjustable doctor blade. Further, if Viscardi did teach the use of an adjustable doctor blade, the rotatable doctor blades of Higginson would represent a

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simpler and more convenient method of adjusting the doctor blade by rotating the dosing device rather than detaching and replacing the doctor blade in the apparatus of Viscardi.

19. Applicant further argues that Higginson teaches a doctor blade in which the blade is positioned above the sump instead of below the sump, and that positioning the blade above the sump in the apparatus of Viscardi would leave the reservoir with an open bottom, causing the coating liquid to drop down onto the web.

20. The examiner maintains that the doctor blade system of Higginson would function as an adjustable doctor blade if the sump were positioned either above or below the blade. Further, in the apparatus of Viscardi, the doctor blade is positioned below the sump. One of ordinary skill in the art, attempting to add the blade of Higginson to the apparatus of Viscardi, would have positioned Higginson's blade below the sump where the doctor blade of Viscardi is normally located. The bottom of the reservoir of Viscardi in view of Higginson would then be closed by the doctor blade.

21. Applicant further argues that the principle of operation of the apparatus of Viscardi is sufficiently different from that of Higginson such that one of ordinary skill would not have considered eliminating the elements of Viscardi for the elements of Higginson. Applicant further argues that insufficient space for the doctor blade system of Higginson.

22. The examiner maintains that the principle of operation of the doctor blade of Higginson is quite similar to that of Viscardi, with the only difference being the location of the sump relative to the blade. One of ordinary skill would readily appreciate that the

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adjustable blade system of Higginson would successfully function as a doctor blade in the position of the doctor blade of Viscardi. The examiner further maintains that sufficient space for the doctor blade system would be present in the apparatus of Viscardi after the removal of the existing doctor blade.

23. In response to applicant's argument based upon the age of the references, contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Hilton whose telephone number is (571)-270-

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5519. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571)-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert Hilton/
Examiner, Art Unit 1716

/Parviz Hassanzadeh/
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